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SUMMARY REPORT ON FINANCIAL, SIZE AND PERFORMANCE  
DATA FOR 32 SWINE FARMS  
OHIO, 1985

by

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# SUMMARY REPORT ON FINANCIAL, SIZE AND PERFORMANCE DATA FOR 32 SWINE FARMS, OHIO, 1985

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## Glossary

# Summary Report On Financial, Size and Performance Data For 32 Swine Farms, Ohio, 1985

## INTRODUCTION

This summary is compiled from a sample of 32 Ohio swine farms participating in the Agrifax farm records program in 1985. Agrifax is operated through the Federal Land Bank and Federal Intermediate Credit Bank of Louisville, District IV, which include the states of Indiana, Kentucky, Tennessee and Ohio. Data on Ohio farms were made available to The Ohio State University for research purposes, with the understanding that none of the data on the individual farms would be identified by name or location.

Farms in the sample were defined as swine farms if at least 30% of the Value of Farm Production was from the sale of feeder pigs or market hogs. These farms are not necessarily representative of all Ohio swine farms, but they do provide an indication of results for Ohio's swine producers. Similar data is also available in 1985, for a sample of 128 Ohio cash grain farms and 114 Ohio dairy farms, and are reported in separate publications.

These farms were summarized for various characteristics including financial performance, debt, farm size, and economic efficiency. In addition, the farms were sorted into subgroups by size of sow herd, by debt to asset ratio, and net farm earnings. The 3 farm size groups, measured by number of sows, were: Up to 80, 80-120, and 120 Plus sows. The 3 categories measured by debt as a percentage of assets (D/A Ratio) were: Up to 40, 41-70, and 71 plus. Net farm earnings were divided into top 1/3, middle 1/3 and bottom 1/3. Various tables show the results of summarizing the data by these categories. The results by size of farm are presented first, followed by the D/A ratio tables and net farm earnings tables.

## HIGHLIGHTS -- SWINE FARMS BY NUMBER OF SOWS

### Overview of Farms Summarized

The 32 Ohio Swine Farms averaged 113 sows, 482 tillable acres, and had annual sales as measured by Value of Farm Production of \$241,687 (Table 1). On average, the Balance Sheet showed \$783,200 in assets, \$413,100 in liabilities, and \$370,100 of equity. Their average debt to asset ratio was .53 which is somewhat high. Crop yields averaged 134 bushels per acre for corn, 41 for soybeans, and 67 for wheat, well above state average. Of the total 482 tillable acres, 191 acres were owned, 224 acres were cash rented, and 66 acres were share rented. This represents 40% owned, 46% cash rented, and 14% shared rented of total tillable acres farmed.

When comparisons are made of farm size measures between the three size groups, there is a normal increase in acres, Value of Farm Production, and balance sheet data. There are differences in how they acquired the land they farm, with Up to 80 sow class owning 48% of the land, while the 120 Plus sow class own only 32%. However, the larger swine farms cash rented a larger percentage of their land at 52% and share rented 17% while the Up to 80 sow class only cash rented 43% and share rented 9%. The 120 Plus sow class also had higher yields of corn and wheat at 156 bushels of corn and 72 bushels of wheat per acre than did the other two smaller groups who had 119-126 bushels of corn and 62 and 66 bushels of wheat per acre, respectively.

### Measures of Earnings

In 1985, these 32 Swine farms had an average Value of Farm Production of \$241,687 (Table 2). Cash receipts of \$251,705 combined with negative inventory changes and other adjustments of (\$10,017) resulted in a final figure of \$241,687. Total expense, including both variable and fixed expenses, totaled \$243,905. See Table 3 for a detailed income statement.

Net Farm Earnings were (\$2,218) on average for these farms in 1985 with an average Net Non-farm Income of \$14,057 for total Net Earnings of \$11,839. Deductions for family living (Operator Labor Draw) and income tax reduced total Net Earnings to a negative number at (\$11,473).

When these figures are examined by size group, only the 120 Plus class farms had negative Net Farm Earnings at (\$18,906). However, all classes of farms have negative Net Earnings but the smaller swine farms had higher Net Farm Earnings and Net Earnings. The larger farms had higher Non Farm Income but also had higher operator and labor withdrawals for family living expenses and higher taxes.

Returns to Unpaid Labor & Management and Return to Equity were negative and averaged (\$24,423) and (\$23,952) respectively, and decreased as the swine farms increased in size. Return to Unpaid Labor and Management is calculated by deducting a 6 percent charge for equity capital from Net Farm Earnings. Return to Investment averaged \$18,055 with the 80-120 sow class having the highest return at \$30,087.

### Balance Sheet Data

Average Balance Sheet results for 1985 shows \$783,200 in Total Assets, \$413,100 in Total Liabilities, and \$370,100 in Total Equity (Table 4). Approximately 20% of the assets are current, 20% intermediate and 60% are fixed assets for all the farms. During 1985, the change in owner equity was a negative (\$43,600) on average which make the average farm insolvent in 8.5

years if this rate continues. The 80-120 sows class equity decreased the most at -\$83,000 while the Up to 80 and 120 Plus sow classes averaged a decrease of -\$20,000.

Other balance sheet ratios help to portray the financial situation of these swine farmers. Measures of liquidity give an indication of how well they may be able to make annual payments. Lenders prefer the Current Ratio, comparing current assets to current liabilities, to be 2.0 or better. The average for all farms in 1985 was only 1.48, below the desired level. The ratio of current to total liabilities of .26 shows that over 26% of their liabilities are due annually. The Intermediate Ratio, comparing current & intermediate assets to current & intermediate liabilities, of 1.92 is close to the desired ratio of 2.0. The 120 Plus sow class had the best current ratio at 1.73 and intermediate ratio at 2.25 while the smaller farms had current ratios of only 1.35 and intermediate ratios of 1.74-1.78. The Up to 80 sow class also had 38% of their liabilities due currently which is very high and expensive to maintain.

Turning to solvency ratios, the average Debt to Asset Ratio (and its mirror image, the Equity Ratio) for all farms were 53% and 47%, respectively, indicating they have slightly more debt than equity, with an average leverage ratio, or liabilities to equity, of 1.12. Net Farm Earnings as a Percent of Average Farm Assets was a negative -.30. The Up to 80 sow class had the lowest debt to asset ratio at .41 while the other swine farms had debt to asset ratios ranging from .56-.57 on average. The Up to 80 sow class also had the highest Net Farm Earnings as a percent of Average Farm Assets at 1.27 while the 120 Plus sow class had the lowest at -2.02.

#### Measures of Financial Efficiency

Swine Farms require a large amount of capital relative to sales. In 1985, these farms averaged 33 cents in sales for each dollar of investment (Table 5). The Turnover Ratio ranged from .28 for the smallest to .41 for the largest swine farms.

It is also interesting to look at a breakdown of the factors that must be covered by the Value of Farm Production. In an accounting definition, Value of Farm Production must equal Variable Expense Plus Fixed Expense Plus Net Farm Earnings. Examining the importance of these parts, Table 5 shows that Interest Expense accounts for 17%, Depreciation 10%, Other Operating Expense 73% and the residual, Net Farm Earnings were slightly negative at -.92%. Interest Expense was the lowest for Up to 80 and 120 Plus herd sizes, and highest for the 80-120 sow class. However the 120 Plus sow class may have failed to meet all interest payments. The Up to 80 class farms had only 66% Other operating expense and positive Net Farm Earnings of 4.53%. Variable Expense as a Percentage of the Value of Farm Production

averaged 61%, Fixed Expense 40%, with Total Expense of 101%. The largest farms had much more Variable Expense at 67%, while the Up to 80 and 80-120 swine farms had only 57% Variable Expense. The 120 Plus sow class had the lowest fixed expense at 38% but they cash rented and share rented more acres and facilities.

#### Efficiency and Cost Measures Per Tillable Acre

The average farm had a Value of Crop Production per tillable acre of \$124.28 with a Total Value of Production per tillable acre of \$522.62 (Table 6). Value of Crop Production is only the value of cash crops sold, and does not include the value of livestock sales or of hay and grain fed. The 120 Plus sow farms had a much greater Total Value of Production per acre at \$622.55. Variable Expense per tillable acre averaged \$306.68, with Fixed Expense at \$199.74 and Total Expense at \$506.42. The 120 Plus sow group had the highest Variable, Fixed, and thus Total Expense per tillable acre at \$641.83.

Machinery Investment Per Tillable Acre averaged \$210.86 and Machine Cost Per Tillable Acre \$96.31. These costs include both field and livestock machinery and equipment. Seed & Plant Cost was \$14.81, Fertilizer and Lime Cost \$37.83, and Spray and Chemical Cost \$19.66 per tillable acre. The 120 Plus sow class had the highest expense for all these items while the 80-120 sow class had expenses slightly lower than the Up to 80 class. The 80-120 sow class had the most investment in land and buildings at \$538,897 compared to the average of only \$429,808.

#### Efficiency and Cost Measures Per Sow

The average number of sows was 113 on the 32 swine farms (Table 7). The average farm had 1.99 litters per sow, 19.30 pigs farrowed per sow per year, 15.93 pigs weaned per sow per year and 8.00 pigs weaned per litter. The Up to 80 sow class was the most efficient farrowing 2.11 litters per year and weaning 17.20 pigs per sow per year, 2 pigs more than the 120 Plus sow group. The 120 Plus sow group did wean slightly more pigs per litter at 8.17.

The average number of feeder pigs sold per farm was 270 with the 120 Plus sow group selling the majority of the feeder pigs, averaging 771 per farm. The 120 Plus class tended to sell their feeder pigs at a slightly higher weight and higher price. The average farm sold 1,424 market hogs at an average weight of 218 pounds for \$45.11 per cwt. The 80-120 sow class sold their market hogs at 226 pounds compared to 212 pounds for the 120 Plus sow class. The smaller farms received slightly higher prices at \$45.28 per cwt. of pork produced compared to \$44.92 for the large producers.

Hog Returns per sow averaged \$1,426 with \$725 in feed fed and \$701 Returns above feed fed. Returns per \$100 of feed fed averaged \$197. The 120 Plus sow group had the lowest Hog Returns, Value of Feed Fed, and Returns above feed fed because they tended to sell more feeder pigs. The 80-120 sow class had the highest Hog returns at \$1,596 and slightly lower feed expense than the Up to 80 sow class at \$809, thus Returns above Feed Fed was the highest at \$787 per sow.

Table 1: Number of Farms, Crop Yields, and Measures of Size for 32 Swine Farms By Number of Sows, Ohio, 1985.

SWINE FARMS		NUMBER OF SOWS			
Size Characteristics	Unit	Up To 80	80-120	120 Plus	All Farms
NUMBER OF FARMS	Number	12	12	8	32
NUMBER OF SOWS	HEAD	49	99	232	113
TOTAL TILLABLE	Acres	310	556	627	482
VALUE OF FARM PRODUCTION	\$	\$130,455	\$258,256	\$383,684	\$241,687
BALANCE SHEET DATA					
Total Assets	\$1,000	523.1	872.9	1,038.6	783.2
Total Liabilities	\$1,000	213.3	492.1	594.1	413.1
Total Equity	\$1,000	309.8	380.7	444.5	370.1
CROP YIELDS					
Corn	Bu./A.	126	119	156	134
Soybeans	Bu./A.	39	42	42	41
Wheat	Bu./A.	62	66	72	67
ACREAGE					
Total Owned	Acres	169	211	225	199
Tillable Owned	Acres	148	229	200	191
Tillable Cash Rented	Acres	135	247	324	224
Tillable Share Rent	Acres	27	80	104	66
TOTAL TILLABLE	Acres	310	556	627	482
PERCENT OF TILLABLE ACRES					
Owned	Percent	48	41	32	40
Cash Rented	Percent	43	45	52	46
Share Rented	Percent	9	14	17	14



Table 2: Income, Expense and Measures of Earnings for 32 Swine Farms  
By Number of Sows, Ohio, 1985.

SWINE FARMS		NUMBER OF SOWS			
Financial Characteristics	Unit	Up To 80	80-120	120 Plus	All Farms
-----					
INCOME					
Total Cash Income	\$	\$142,402	\$268,480	\$390,495	\$251,705
Other Income & Inv. Changes	\$	(\$11,947)	(\$10,225)	(\$6,811)	(\$10,017)
VALUE OF FARM PRODUCTION	\$	\$130,455	\$258,256	\$383,684	\$241,687
EXPENSE					
Total Variable Expense	\$	\$74,209	\$147,581	\$258,130	\$147,704
Total Fixed Expense	\$	\$50,330	\$109,901	\$144,460	\$96,202
TOTAL FARM EXPENSE	\$	\$124,539	\$257,482	\$402,589	\$243,905
EARNINGS					
Net Farm Earnings	\$	\$5,916	\$773	(\$18,906)	(\$2,218)
Net NonFarm Income	\$	\$7,397	\$14,212	\$23,817	\$14,057
NET EARNINGS	\$	\$13,313	\$14,985	\$4,911	\$11,839
Operator Labor Draw	\$	\$17,017	\$22,275	\$27,997	\$21,734
Income Tax	\$	\$831	\$1,469	\$2,867	\$1,579
-----					
TOTAL NET EARNINGS	\$	(\$4,535)	(\$8,759)	(\$25,952)	(\$11,473)
NET FARM EARNINGS	\$	\$5,916	\$773	(\$18,906)	(\$2,218)
RETURN TO UNPAID LABOR & MGT	\$	(\$12,673)	(\$22,071)	(\$45,575)	(\$24,423)
RETURN ON INVESTMENT	\$	\$10,711	\$30,087	\$11,026	\$18,055
RETURN TO EQUITY	\$	(\$11,101)	(\$21,502)	(\$46,902)	(\$23,952)

Table 3: Income Statement for 32 Swine Farms By Number of Sows,  
Ohio, 1985.

SWINE FARMS		NUMBER OF SOWS			
Income Statement	Unit	Up To 80	80-120	120 Plus	All Farms
<hr/>					
CASH INCOME					
Crops	\$	\$40,638	\$67,399	\$77,380	\$59,859
Hogs	\$	\$77,266	\$148,369	\$285,035	\$155,872
Dairy Products	\$	\$0	\$9,567	\$0	\$3,588
Dairy	\$	\$0	\$978	\$0	\$367
Beef	\$	\$13,925	\$8,108	\$473	\$8,381
Sheep	\$	\$90	\$134	\$0	\$84
CCC	\$	\$0	\$15,082	\$0	\$5,656
Other Farm Income	\$	\$10,483	\$18,843	\$27,607	\$17,899
<hr/>					
TOTAL CASH INCOME	\$	\$142,402	\$268,480	\$390,495	\$251,705
Resale Purchases	\$	(\$6,550)	(\$12,628)	(\$13,403)	(\$10,543)
Breeder L.S. Purchases	\$	(\$1,993)	(\$2,193)	(\$3,496)	(\$2,444)
L.S. Inventory Change	\$	(\$5,609)	\$4,364	(\$1,847)	(\$929)
Crop & Feed Inv. Change	\$	\$1,284	(\$588)	\$13,562	\$3,652
Acct Rec Change	\$	(\$26)	\$970	(\$1,831)	(\$104)
Net Non-Cash Farm Inc	\$	\$155	\$79	\$0	\$88
L.S Pay/Futures Change	\$	\$792	(\$228)	\$204	\$263
<hr/>					
VALUE OF FARM PROD.	\$	\$130,455	\$258,256	\$383,684	\$241,687
EXPENSE					
Variable Expense					
Wages	\$	\$2,610	\$12,114	\$27,586	\$12,418
Repair Machinery	\$	\$6,328	\$9,426	\$17,030	\$10,165
Feed	\$	\$25,275	\$52,106	\$109,977	\$56,512
Seed & Plants	\$	\$4,765	\$7,065	\$10,784	\$7,133
Fertilizer & Lime	\$	\$10,155	\$21,988	\$24,672	\$18,222
Spray & Chemicals	\$	\$6,137	\$10,473	\$12,958	\$9,468
Custom Hire	\$	\$2,534	\$3,519	\$2,486	\$2,891
Supplies	\$	\$1,873	\$3,289	\$5,313	\$3,264
Breeding	\$	\$12	\$2	\$473	\$123
Vet & Medicine	\$	\$1,789	\$3,316	\$9,353	\$4,252
Fuel & Lube	\$	\$5,876	\$11,848	\$18,033	\$11,155
Utilities	\$	\$2,436	\$4,844	\$8,206	\$4,782
Marketing	\$	\$364	\$502	\$1,342	\$660
Storage	\$	\$1,601	\$383	\$1,983	\$1,240
Other Than Above	\$	\$2,453	\$6,706	\$7,934	\$5,442
<hr/>					
TOTAL VARIABLE EXPENSE	\$	\$74,209	\$147,581	\$258,130	\$147,704
Fixed Expense					
Interest	\$	\$21,812	\$51,589	\$57,928	\$42,007
Taxes	\$	\$1,431	\$3,554	\$5,437	\$3,228
Lease Payments	\$	\$9,212	\$24,047	\$34,472	\$21,090
Insurance	\$	\$1,569	\$3,168	\$4,859	\$2,991
Building Repairs	\$	\$885	\$1,421	\$3,855	\$1,829
Building Depreciation	\$	\$5,421	\$10,996	\$17,377	\$10,500
Equipment Depreciation	\$	\$10,000	\$15,127	\$20,532	\$14,556
<hr/>					
TOTAL FIXED EXPENSE	\$	\$50,330	\$109,901	\$144,460	\$96,202
TOTAL FARM EXPENSE	\$	\$124,539	\$257,482	\$402,589	\$243,905
NET FARM EARNINGS	\$	\$5,916	\$773	(\$18,906)	(\$2,218)

Table 4: Balance Sheet Data on 32 Swine Farms By Number of Sows,  
Ohio 1985.

SWINE FARMS		NUMBER OF SOWS			
Balance Sheet Information	Unit	Up To 80	80-120	120 Plus	All Farms
-----					
BALANCE SHEET DATA					
Current Assets	\$1,000	108.7	153.9	241.3	158.8
Current Liabilities	\$1,000	80.2	113.9	139.2	107.6
Current Equity	\$1,000	28.5	40.0	102.1	51.2
Intermediate Assets	\$1,000	90.6	167.6	236.1	155.8
Inter. Liabilities	\$1,000	31.9	70.7	72.8	56.7
Inter. Equity	\$1,000	58.7	96.9	163.3	99.1
Fixed Assets	\$1,000	323.9	551.3	561.3	468.5
Fixed Liabilities	\$1,000	101.2	307.5	382.2	248.8
Fixed Equity	\$1,000	222.7	243.8	179.1	219.7
Total Assets	\$1,000	523.1	872.9	1,038.6	783.2
Total Liabilities	\$1,000	213.3	492.1	594.1	413.1
Total Equity	\$1,000	309.8	380.7	444.5	370.1
Change in Equity, 1984-5	\$1,000	-19.1	-83.8	-20.0	-43.6
FINANCIAL PERFORMANCE MEASURES					
Liquidity Ratios					
Current Ratio (CA/CL)	Ratio	1.35	1.35	1.73	1.48
CurrLiab/TotLiab (CL/TL)	Ratio	.38	.23	.23	.26
Inter. (CA+IA)/(CL+IL)	Ratio	1.78	1.74	2.25	1.92
Solvency Ratios					
Debt/Asset(D/A)or(TL/TA)	Ratio	.41	.56	.57	.53
Equity Ratio (TE/TL)	Ratio	.59	.44	.43	.47
Leverage Ratio (TL/TE)	Ratio	.69	1.29	1.43	1.12
Profitability					
Net Farm Earnings as % of					
Average Farm Assets	\$	1.27	.09	-2.02	-.30

Table 5: Measures of Financial Efficiency on 32 Swine Farms  
By Number of Sows, Ohio, 1985.

SWINE FARMS		NUMBER OF SOWS			
Efficiency Measures	Unit	Up To 80	80-120	120 Plus	All Farms
-----					
FINANCIAL EFFICIENCY					
Turnover Ratio	Ratio	.28	.30	.41	.33
Debt Service Ratio	Ratio	14.93	21.02	17.73	18.48
PROFITABILITY					
Net Profit Margin	Percent	8.21	11.65	2.87	7.47
Return on Investment	Percent	2.29	3.53	1.18	2.48
Return on Equity	Percent	-3.58	-5.65	-10.55	-6.47
Rate of Growth in Equity	Percent	-1.46	-2.30	-5.84	-3.10
EXPENSE AND EARNINGS AS A PERCENT OF VALUE OF FARM PRODUCTION					
Interest	Percent	16.72	19.98	15.10	17.38
Depreciation	Percent	11.82	10.11	9.88	10.37
Other Operating Exp	Percent	66.92	69.61	79.95	73.17
Net Farm Earnings	Percent	4.53	.30	-4.93	-.92
Total	Percent	100.00	100.00	100.00	100.00
TOTAL EXPENSE AS A PERCENTAGE OF VALUE OF FARM PRODUCTION					
Variable Expense	Percent	56.89	57.15	67.28	61.11
Fixed Expense	Percent	38.58	42.56	37.65	39.80
Total	Percent	95.47	99.70	104.93	100.92

Table 6: Efficiency Measures and Cost per Tillable Acre on 32 Swine Farms  
By Number of Sows, Ohio, 1985.

SWINE FARMS		NUMBER OF SOWS			
Efficiency Measures	Unit	Up To 80	80-120	120 Plus	All Farms
-----					
PRODUCTION EFFICIENCY PER TILLABLE ACRE					
Value of Crop Prod./T.A.	\$/A	\$130.98	\$121.24	\$123.36	\$124.28
Value of Total Prod./T.A.	\$/A	\$458.99	\$482.95	\$622.55	\$522.62
Variable Expense Per T.A.	\$/A	\$239.19	\$265.47	\$411.53	\$306.68
Fixed Expense Per T.A.	\$/A	\$162.22	\$197.69	\$230.31	\$199.74
Total Expense Per T.A.	\$/A	\$401.42	\$463.17	\$641.83	\$506.42
Machinery Investment/T.A.	\$/A	\$215.52	\$205.35	\$214.72	\$210.86
Machinery Cost Per T. A.					
Repair Machinery	\$/A	\$20.40	\$16.96	\$27.15	\$21.11
Custom Hire	\$/A	\$8.17	\$6.33	\$3.96	\$6.00
Lube & Fuel Cost	\$/A	\$18.94	\$21.31	\$28.75	\$23.16
Equipment Depreciation	\$/A	\$32.23	\$27.21	\$32.73	\$30.22
Machinery Invest @7.5%	\$/A	\$16.16	\$15.40	\$16.10	\$15.81
Machinery Cost Per T.A.	\$/A	<u>\$95.90</u>	<u>\$87.21</u>	<u>\$108.70</u>	<u>\$96.31</u>
Seed & Plant Cost Per T.A.	\$/A	\$15.36	\$12.71	\$17.19	\$14.81
Fert. & Lime Cost Per T.A.	\$/A	\$32.73	\$39.55	\$39.33	\$37.83
Spray & Chem Cost Per T.A.	\$/A	\$19.78	\$18.84	\$20.66	\$19.66
CAPITAL INVESTMENT					
Feed & Crop Capital	\$	\$46,740	\$55,318	\$95,861	\$62,237
Livestock Capital	\$	\$44,793	\$89,453	\$120,138	\$80,377
Machinery Capital	\$	\$66,865	\$114,158	\$134,681	\$101,554
Land & Building Cap	\$	\$274,621	\$538,897	\$498,956	\$429,808
Other Capital	\$	\$34,110	\$53,860	\$85,234	\$54,297
TOTAL FARM ASSETS	\$	<u>\$467,129</u>	<u>\$851,685</u>	<u>\$934,869</u>	<u>\$728,272</u>

Table 7: Swine Production Measures on 32 Swine Farms By Number of Sows, Ohio, 1985

SWINE FARMS		NUMBER OF SOWS			
Efficiency Measures	Unit	Up To 80	80-120	120 Plus	All Farms
NUMBER OF SOWS	HEAD	49	99	232	113
NUMBER OF LITTERS	NO.	103	208	436	226
NUMBER OF PIGS BORN	NO.	1,027	1,967	4,253	2,186
NUMBER OF PIGS WEANED	NO.	836	1,600	3,565	1,805
NUMBER OF LITTERS/SOW	LIT./SOW/YR	2.11	2.11	1.88	1.99
NUMBER OF PIGS/SOW	PIGS/SOW/YR	21.15	19.95	18.31	19.30
NUMBER PIGS WEANED/SOW	PWN/SOW/YR	17.20	16.23	15.35	15.93
NUMBER OF PIGS WEANED PER LITTER		8.15	7.68	8.17	8.00
TOTAL DEBT PER SOW	\$/COW	\$4,354	\$4,971	\$2,561	\$3,656
NUMBER FEEDER PIGS SOLD	\$	91	66	771	270
AVERAGE WEIGHT FEEDER PIGS	LBS.	53	52	55	55
PRICE OF FEEDER PIGS SOLD	\$/HD.	\$41	\$39	\$46	\$45
NUMBER OF MARKET HOGS SOLD	\$	741	1,407	2,384	1,424
AVERAGE WEIGHT MARKET HOGS	LBS.	219	226	212	218
PRICE MARKET HOGS SOLD	\$/CWT.	\$45.28	\$45.26	\$44.92	\$45.11
SALES OF FEEDER PIGS	\$	\$3,764	\$2,561	\$35,238	\$12,032
SALES OF MARKET HOGS	\$	\$73,588	\$144,113	\$226,621	\$140,123
OTHER HOGS INCOME	\$	\$3,499	\$12,424	\$36,816	\$15,767
TOTAL HOG RETURNS	\$	\$80,851	\$159,098	\$298,675	\$167,922
POUNDS OF FEEDER PIGS SOLD	LBS.	4,846	3,404	42,569	14,755
POUNDS OF MARKET HOGS SOLD	LBS.	162,523	318,447	504,420	310,606
OTHER HOGS SOLD	LBS.	27,137	47,238	102,702	54,914
TOTAL POUNDS HOGS SOLD	LBS.	194,506	369,089	649,691	380,275
VALUE OF CORN FED	\$	\$21,224	\$38,788	\$40,956	\$32,724
VALUE OF CONCENTRATES FED	\$	\$1,526	\$645	\$1,495	\$1,214
VALUE OF PURCHASED FEED FED	\$	\$21,919	\$40,860	\$104,313	\$51,180
VALUE OF OTHER FEED FED	\$	\$15	\$381	\$544	\$287
TOTAL VALUE OF FEED FED	\$	\$44,684	\$80,674	\$147,307	\$85,404
POUNDS OF CORN FED	CWT.	4,739	8,599	9,226	7,308
POUNDS OF CONCENTRATES FED	CWT.	224	164	320	230
POUNDS PURCHASED FEED FED	CWT.	2,186	3,807	12,311	5,538
POUNDS OF OTHER FEED FED	CWT.	5	85	115	63
TOTAL POUNDS OF FEED FED	CWT.	7,153	12,655	21,971	13,138
HOG RETURNS PER SOW	\$/SOW	\$1,588	\$1,596	\$1,286	\$1,426
VALUE OF FEED FED PER SOW	\$/SOW	\$878	\$809	\$634	\$725
RETURNS ABOVE FEED FED/SOW	\$/SOW	\$710	\$787	\$652	\$701
RETURNS PER \$100 FEED FED	\$/ \$100	\$181	\$197	\$203	\$197
NET FARM EARNINGS	\$	\$5,916	\$773	(\$18,906)	(\$2,218)

## HIGHLIGHTS--SWINE FARMS BY DEBT TO ASSET RATIO CLASSES

Tables 8 through 14 give similar information for the 32 Swine farms sorted by debt to asset ratios. The .41-.70 debt to asset group had the largest number of farms at 14 with 11 farms in the up to .40 group and 7 in the .71 Plus debt to asset group. The number of sows increased from 86 to 115 per farm as the debt to asset ratio increased. The .41-.70 group had the highest number of tillable acres at 618, double the .40 group at only 290 acres. The .41-.70 group also owned the most acreage at 46% compared to a low of only 25% for the .71 Plus group who also cash rented 62% of their land.

In Table 9, Net Farm Earnings range from a high of \$7,799 in the .41-.70 debt to asset class to a negative (\$4,550) in the Up to .40 class. Total Net Earnings ranged from (\$2,848) to (\$28,218) as the class by debt to asset ratio increases. Income statements by D/A Ratio are in Table 10.

Table 11 shows the financial performance measures for the swine farms. The .71 Plus class has a owner's equity change of (\$115,400) in 1985 with only \$99,500 in total equity left on average, so most of these farms are approaching bankruptcy. These farms have a leverage ratio of 5.50 which means they have 5.50 times as much debt as they do equity. Net Farm Earnings as a percent of Average Farm Assets ranged from .84 for the .41-.70 group down to -2.80% for the .71 Plus group.

The classes of farms with high D/A ratios had the highest Turnover Ratio, Net Profit Margin, and Return To Investment (Table 12). However, the .71 Plus class had a -34.75% return on equity and a -28.06% rate of growth in equity. Interest expense represents nearly 19% of the Value of Farm Production on the .71 Plus group of farms, compared to only 11% on farms with Up To 40 debt to asset ratios, a difference of 7%. The Up to .40 and .71 Plus swine farms have high operating expenses at 79% compared to the .41-.70 farms with only 67% operating expense. The .41-.70 class also has the lowest variable and total expense as a percentage of the Value of Farm Production.

In Table 13, the Up to .40 D/A Ratio class has the highest Value of Total Production Per Tillable Acre at \$657 but also the highest Variable expense per tillable acre at \$376.98, Machine Investment at \$289.94, and Machine cost at \$127.59. The .41-.70 had the lowest Value of Total Production per tillable acre at \$479 but also had the lowest Variable, Fixed, and Total expense at \$431.88, lowest Machine investment at \$189 and the lowest Machine cost at \$85. The .41-.70 group had the lowest expense because they had double the number of acres of the Up to .40 group.

Swine production efficiency measures are shown in Table 14. The number of sows ranged from 86 to 152 sows per farm as debt to asset ratios increased. The swine farms in the lower debt to asset ratio groups had a slightly higher efficiency with 2.00 litters farrowed per sow and 8.32 pigs weaned per litter per sow. The Up to .40 group also sold more feeder pigs at a higher weight and price and also sold their market hogs at a slightly higher

weight and \$1.50 higher price per cwt. of pork produced. The 71 Plus sow group had the highest Return above feed fed at \$719 and Returns per \$100 feed fed at \$205. The Up to .40 group had the lowest Hog Returns per sow, Value of feed fed, and lowest Return above feed fed but they also sold more feeder pigs.

Table 8: Number of Farms, Crop Yields, and Measures of Size for 32 Swine Farms By Debt to Asset Ratios, Ohio, 1985.

SWINE FARMS		DEBT AS A PERCENTAGE OF ASSETS			
Size Characteristics	Unit	Up To 40	41-70	71 Plus	All Farms
-----		-----	-----	-----	-----
NUMBER OF FARMS	Number	11	14	7	32
NUMBER OF SOWS	HEAD	86	115	152	113
TOTAL TILLABLE	Acres	290	618	511	482
VALUE OF FARM PRODUCTION	\$	\$166,915	\$278,508	\$285,545	\$241,687
BALANCE SHEET DATA					
Total Assets	\$1,000	616.8	981.7	647.5	783.2
Total Liabilities	\$1,000	190.3	520.7	548.0	413.1
Total Equity	\$1,000	426.5	461.0	99.5	370.1
CROP YIELDS					
Corn	Bu./A.	114	149	120	134
Soybeans	Bu./A.	40	42	41	41
Wheat	Bu./A.	73	67	62	67
ACREAGE					
Total Owned	Acres	137	267	158	199
Tillable Owned	Acres	116	282	128	191
Tillable Cash Rented	Acres	126	255	319	224
Tillable Share Rent	Acres	48	81	64	66
TOTAL TILLABLE	Acres	290	618	511	482
PERCENT OF TILLABLE ACRES					
Owned	Percent	40	46	25	40
Cash Rented	Percent	43	41	62	46
Share Rented	Percent	17	13	13	14



Table 9: Income, Expense and Measures of Earnings for 32 Swine Farms  
By Debt to Asset Ratios, Ohio, 1985.

SWINE FARMS		DEBT AS A PERCENTAGE OF ASSETS			
Financial Characteristics	Unit	Up To 40	41-70	71 Plus	All Farms
-----					
INCOME					
Total Cash Income	\$	\$190,249	\$296,162	\$259,364	\$251,705
Other Income & Inv. Changes	\$	(\$23,333)	(\$17,654)	\$26,181	(\$10,017)
VALUE OF FARM PRODUCTION	\$	\$166,915	\$278,508	\$285,545	\$241,687
EXPENSE					
Total Variable Expense	\$	\$109,223	\$159,914	\$183,753	\$147,704
Total Fixed Expense	\$	\$62,243	\$110,795	\$120,380	\$96,202
TOTAL FARM EXPENSE	\$	\$171,465	\$270,709	\$304,133	\$243,905
EARNINGS					
Net Farm Earnings	\$	(\$4,550)	\$7,799	(\$18,587)	(\$2,218)
Net NonFarm Income	\$	\$20,467	\$12,387	\$7,326	\$14,057
NET EARNINGS	\$	\$15,917	\$20,186	(\$11,262)	\$11,839
Operator Labor Draw	\$	\$15,922	\$29,163	\$16,007	\$21,734
Income Tax	\$	\$2,843	\$901	\$950	\$1,579
-----					
TOTAL NET EARNINGS	\$	(\$2,848)	(\$9,878)	(\$28,218)	(\$11,473)
NET FARM EARNINGS	\$	(\$4,550)	\$7,799	(\$18,587)	(\$2,218)
RETURN TO UNPAID LABOR & MGT	\$	(\$30,140)	(\$19,862)	(\$24,560)	(\$24,423)
RETURN ON INVESTMENT	\$	(\$1,355)	\$32,042	\$20,585	\$18,055
RETURN TO EQUITY	\$	(\$20,472)	(\$21,364)	(\$34,594)	(\$23,952)

Table 10: Income Statement for 32 Swine Farms By Debt to Asset Ratio, Ohio, 1985.

SWINE FARMS		DEBT AS A PERCENTAGE OF ASSETS			
Income Statement	Unit	Up To 40	41-70	71 Plus	All Farms
<hr/>					
CASH INCOME					
Crops	\$	\$33,832	\$95,893	\$28,690	\$59,859
Hogs	\$	\$129,762	\$158,966	\$190,714	\$155,872
Dairy Products	\$	\$0	\$8,200	\$0	\$3,588
Dairy	\$	\$0	\$839	\$0	\$367
Beef	\$	\$10,735	\$10,608	\$227	\$8,381
Sheep	\$	\$4	\$115	\$149	\$84
CCC	\$	\$0	\$0	\$28,855	\$5,656
Other Farm Income	\$	\$15,916	\$21,542	\$13,730	\$17,899
<hr/>					
TOTAL CASH INCOME	\$	\$190,249	\$296,162	\$259,364	\$251,705
Resale Purchases	\$	(\$7,390)	(\$16,695)	(\$3,192)	(\$10,543)
Breeder L.S. Purchases	\$	(\$1,827)	(\$3,247)	(\$1,807)	(\$2,444)
L.S. Inventory Change	\$	(\$9,761)	\$2,905	\$5,282	(\$929)
Crop & Feed Inv. Change	\$	(\$3,911)	(\$1,861)	\$26,561	\$3,652
Acct Rec Change	\$	(\$330)	\$380	(\$716)	(\$104)
Net Non-Cash Farm Inc	\$	\$14	\$163	\$54	\$88
L.S Pay/Futures Change	\$	(\$128)	\$701	\$0	\$263
<hr/>					
VALUE OF FARM PROD.	\$	\$166,915	\$278,508	\$285,545	\$241,687
EXPENSE					
Variable Expense					
Wages	\$	\$10,895	\$14,231	\$11,187	\$12,418
Repair Machinery	\$	\$7,084	\$12,143	\$11,052	\$10,165
Feed	\$	\$42,884	\$51,443	\$88,069	\$56,512
Seed & Plants	\$	\$4,748	\$8,148	\$8,848	\$7,133
Fertilizer & Lime	\$	\$9,244	\$26,188	\$16,398	\$18,222
Spray & Chemicals	\$	\$6,417	\$11,430	\$10,338	\$9,468
Custom Hire	\$	\$2,008	\$3,521	\$3,020	\$2,891
Supplies	\$	\$2,968	\$3,386	\$3,485	\$3,264
Breeding	\$	\$13	\$2	\$540	\$123
Vet & Medicine	\$	\$3,053	\$4,711	\$5,220	\$4,252
Fuel & Lube	\$	\$10,178	\$11,407	\$12,185	\$11,155
Utilities	\$	\$4,051	\$5,436	\$4,621	\$4,782
Marketing	\$	\$525	\$772	\$649	\$660
Storage	\$	\$511	\$1,788	\$1,290	\$1,240
Other Than Above	\$	\$4,644	\$5,310	\$6,851	\$5,418
<hr/>					
TOTAL VARIABLE EXPENSE	\$	\$109,223	\$159,914	\$183,753	\$147,704
Fixed Expense					
Interest	\$	\$19,117	\$53,407	\$55,179	\$42,007
Taxes	\$	\$2,280	\$3,752	\$3,671	\$3,228
Lease Payments	\$	\$17,642	\$18,397	\$31,896	\$21,090
Insurance	\$	\$1,651	\$3,314	\$4,452	\$2,991
Building Repairs	\$	\$1,323	\$2,461	\$1,358	\$1,829
Building Depreciation	\$	\$8,833	\$12,422	\$9,277	\$10,500
Equipment Depreciation	\$	\$11,397	\$17,042	\$14,548	\$14,556
<hr/>					
TOTAL FIXED EXPENSE	\$	\$62,243	\$110,795	\$120,380	\$96,202
TOTAL FARM EXPENSE	\$	\$171,465	\$270,709	\$304,133	\$243,905
NET FARM EARNINGS	\$	(\$4,550)	\$7,799	(\$18,587)	(\$2,218)

Table 11: Balance Sheet Data on 32 Swine Farms By Debt to Asset Ratios, Ohio, 1985.

SWINE FARMS		DEBT AS A PERCENTAGE OF ASSETS			
Balance Sheet Information	Unit	Up To 40	41-70	71 Plus	All Farms
-----					
BALANCE SHEET DATA					
Current Assets	\$1,000	121.1	195.0	145.7	158.8
Current Liabilities	\$1,000	54.2	146.5	113.7	107.6
Current Equity	\$1,000	66.9	48.5	32.0	51.2
Intermediate Assets	\$1,000	151.0	165.3	144.4	155.8
Inter. Liabilities	\$1,000	25.3	82.7	54.0	56.7
Inter. Equity	\$1,000	125.7	82.7	90.4	99.1
Fixed Assets	\$1,000	344.7	621.4	357.4	468.5
Fixed Liabilities	\$1,000	110.7	291.6	380.3	248.8
Fixed Equity	\$1,000	234.0	329.8	-22.8	219.7
Total Assets	\$1,000	616.8	981.7	647.5	783.2
Total Liabilities	\$1,000	190.3	520.7	548.0	413.1
Total Equity	\$1,000	426.5	461.0	99.5	370.1
Change in Equity, 1984-5	\$1,000	7.6	-47.9	-115.4	-43.6
FINANCIAL PERFORMANCE MEASURES					
Liquidity Ratios					
Current Ratio (CA/CL)	Ratio	2.23	1.33	1.28	1.48
CurrLiab/TotLiab (CL/TL)	Ratio	.28	.28	.21	.26
Inter. (CA+IA)/(CL+IL)	Ratio	3.42	1.57	1.73	1.92
Solvency Ratios					
Debt/Asset(D/A)or(TL/TA)	Ratio	.31	.53	.85	.53
Equity Ratio (TE/TL)	Ratio	.69	.47	.15	.47
Leverage Ratio (TL/TE)	Ratio	.45	1.13	5.50	1.12
Profitability					
Net Farm Earnings as % of Average Farm Assets	\$	-.90	.84	-2.80	-.30

Table 12: Measures of Financial Efficiency on 32 Swine Farms  
By Debt to Asset Ratio, Ohio, 1985.

SWINE FARMS		DEBT AS A PERCENTAGE OF ASSETS			
Efficiency Measures	Unit	Up To 40	41-70	71 Plus	All Farms
FINANCIAL EFFICIENCY					
Turnover Ratio	Ratio	.33	.30	.43	.33
Debt Service Ratio	Ratio	1.82	17.82	35.08	18.48
PROFITABILITY					
Net Profit Margin	Percent	-.81	11.50	7.21	7.47
Return on Investment	Percent	-.27	3.43	3.10	2.48
Return on Equity	Percent	-4.80	-4.63	-34.75	-6.47
Rate of Growth in Equity	Percent	-.67	-2.14	-28.35	-3.10
EXPENSE AND EARNINGS AS A PERCENT OF VALUE OF FARM PRODUCTION					
Interest	Percent	11.45	19.18	19.32	17.38
Depreciation	Percent	12.12	10.58	8.34	10.37
Other Operating Exp	Percent	79.15	67.44	78.84	73.17
Net Farm Earnings	Percent	-2.73	2.80	-6.51	-.92
Total	Percent	100.00	100.00	100.00	100.00
TOTAL EXPENSE AS A PERCENTAGE OF VALUE OF FARM PRODUCTION					
Variable Expense	Percent	65.44	57.42	64.35	61.11
Fixed Expense	Percent	37.29	39.78	42.16	39.80
Total	Percent	102.73	97.20	106.51	100.92

Table 13: Efficiency Measures and Cost per Tillable Acre on 32 Swine Farms  
By Debt to Asset Ratios, Ohio, 1985.

SWINE FARMS		DEBT AS A PERCENTAGE OF ASSETS			
Efficiency Measures	Unit	Up To 40	41-70	71 Plus	All Farms
-----					
PRODUCTION EFFICIENCY PER TILLABLE ACRE					
Value of Crop Prod./T.A.	\$/A	\$116.77	\$155.20	\$56.18	\$124.28
Value of Total Prod./T.A.	\$/A	\$656.65	\$479.34	\$507.85	\$522.62
Variable Expense Per T.A.	\$/A	\$376.98	\$258.82	\$359.80	\$306.68
Fixed Expense Per T.A.	\$/A	\$214.83	\$179.32	\$235.71	\$199.74
Total Expense Per T.A.	\$/A	\$591.82	\$438.14	\$595.50	\$506.42
Machinery Investment/T.A.	\$/A	\$289.94	\$183.84	\$205.74	\$210.86
Machinery Cost Per T. A.					
Repair Machinery	\$/A	\$24.45	\$19.65	\$21.64	\$21.11
Custom Hire	\$/A	\$6.93	\$5.70	\$5.91	\$6.00
Lube & Fuel Cost	\$/A	\$35.13	\$18.46	\$23.86	\$23.16
Equipment Depreciation	\$/A	\$39.34	\$27.58	\$28.49	\$30.22
Machinery Invest @7.5%	\$/A	\$21.75	\$13.79	\$15.43	\$15.81
Machinery Cost Per T.A.	\$/A	\$127.59	\$85.18	\$95.33	\$96.31
Seed & Plant Cost Per T.A.	\$/A	\$16.39	\$13.19	\$17.33	\$14.81
Fert. & Lime Cost Per T.A.	\$/A	\$31.91	\$42.38	\$32.11	\$37.83
Spray & Chem Cost Per T.A.	\$/A	\$22.15	\$18.50	\$20.24	\$19.66
CAPITAL INVESTMENT					
Feed & Crop Capital	\$	\$39,870	\$84,993	\$51,872	\$62,237
Livestock Capital	\$	\$60,633	\$92,798	\$86,561	\$80,377
Machinery Capital	\$	\$84,002	\$113,584	\$105,074	\$101,554
Land & Building Cap	\$	\$258,115	\$585,048	\$389,130	\$429,808
Other Capital	\$	\$65,203	\$57,544	\$30,666	\$54,297
-----					
TOTAL FARM ASSETS	\$	\$507,824	\$933,967	\$663,303	\$728,272

Table 14: Swine Production Measures on 32 Swine Farms By  
Debt to Asset Ratios, Ohio, 1985

SWINE FARMS		DEBT AS A PERCENTAGE OF ASSETS			
Efficiency Measures	Unit	Up To 40	41-70	71 Plus	All Farms
NUMBER OF SOWS	HEAD	86	115	152	113
NUMBER OF LITTERS	NO.	173	232	296	226
NUMBER OF PIGS BORN	NO.	1,664	2,192	2,995	2,186
NUMBER OF PIGS WEANED	NO.	1,435	1,820	2,356	1,805
NUMBER OF LITTERS/SOW	LIT./SOW/YR	2.00	2.01	1.95	1.99
NUMBER OF PIGS/SOW	PIGS/SOW/YR	19.33	19.01	19.72	19.30
NUMBER PIGS WEANED/SOW	PWN/SOW/YR	16.67	15.78	15.51	15.93
NUMBER OF PIGS WEANED PER LITTER		8.32	7.84	7.96	8.00
TOTAL DEBT PER SOW	\$/COW	\$2,212	\$4,528	\$3,605	\$3,656
NUMBER FEEDER PIGS SOLD	\$	453	202	44	270
AVERAGE WEIGHT FEEDER PIGS	LBS.	59	48	45	55
PRICE OF FEEDER PIGS SOLD	\$/HD.	\$47	\$41	\$38	\$45
NUMBER OF MARKET HOGS SOLD	\$	972	1,481	2,271	1,424
AVERAGE WEIGHT MARKET HOGS	LBS.	224	215	219	218
PRICE MARKET HOGS SOLD	\$/CWT.	\$46.22	\$44.76	\$44.63	\$45.11
SALES OF FEEDER PIGS	\$	\$21,192	\$8,260	\$1,685	\$12,032
SALES OF MARKET HOGS	\$	\$100,710	\$142,159	\$221,539	\$140,123
OTHER HOGS INCOME	\$	(\$3,033)	\$20,408	\$45,062	\$15,767
TOTAL HOG RETURNS	\$	\$118,869	\$170,827	\$268,286	\$167,922
POUNDS OF FEEDER PIGS SOLD	LBS.	26,573	9,666	1,985	14,755
POUNDS OF MARKET HOGS SOLD	LBS.	217,915	317,590	496,368	310,606
OTHER HOGS SOLD	LBS.	13,312	70,270	106,519	54,914
TOTAL POUNDS HOGS SOLD	LBS.	257,800	397,526	604,872	380,275
VALUE OF CORN FED	\$	\$25,477	\$37,825	\$35,405	\$32,724
VALUE OF CONCENTRATES FED	\$	\$1,180	\$1,326	\$995	\$1,214
VALUE OF PURCHASED FEED FED	\$	\$32,261	\$50,500	\$94,569	\$51,180
VALUE OF OTHER FEED FED	\$	\$398	\$288	\$40	\$287
TOTAL VALUE OF FEED FED	\$	\$59,317	\$89,939	\$131,009	\$85,404
POUNDS OF CORN FED	CWT.	5,599	8,476	8,029	7,308
POUNDS OF CONCENTRATES FED	CWT.	227	244	198	230
POUNDS OF PURCHASED FEED FED	CWT.	3,464	5,112	11,208	5,538
POUNDS OF OTHER FEED FED	CWT.	80	70	400	63
TOTAL POUNDS OF FEED FED	CWT.	9,371	13,902	19,440	13,138
HOG RETURNS PER SOW	\$/SOW	\$1,381	\$1,467	\$1,406	\$1,426
VALUE OF FEED FED PER SOW	\$/SOW	\$689	\$772	\$687	\$725
RETURNS ABOVE FEED FED/SOW	\$/SOW	\$692	\$695	\$719	\$701
RETURNS PER \$100 FEED FED	\$/100	\$200	\$190	\$205	\$197
NET FARM EARNINGS	\$	(\$4,550)	\$7,799	(\$18,587)	(\$2,218)

## HIGHLIGHTS -- SWINE FARMS BY NET FARM EARNINGS

### Overview of Farms Summarized

Table 15 through 21 show similiar information for the farms sorted by net farm earnings. The bottom 1/3 swine farms had the most sows at 148, the most tillable acres at 596, and the highest Value of Farm Production at \$284,557. The top 1/3 farms had fewer sows at 94, but less debt with a debt to asset ratio of .49 compared to .62 for the bottom group. The middle 1/3 farms had the fewest tillable acres at 410 and the lowest Value of Farm Production at \$194,471. The top 1/3 farms were more efficient in crop production with higher yields in corn and soybeans at 152 bushels of corn and 48 bushels of soybeans per acre. The bottom 1/3 group owned less land at 33% and cash rented more land at 55% while the top 1/3 farms share rented considerably more land at 22% than the other farms.

### Measures of Earnings

In Table 16, Net Farm Earnings range from a high of \$33,218 in the top 1/3 farms to a negative (\$44,985) in the bottom 1/3 farms. Total Net Earnings ranged in a similar pattern from \$19,093 to (\$43,812) from the top 1/3 to the bottom 1/3 farms by net farm earnings. Return to Labor & Management, Return On Investment, and Return on Equity was positive for the top 1/3 farms and negative for the bottom 1/3 farms. Income statements by Net Farm Earnings are in Table 17.

### Balance Sheet Ratios

The balance sheet data shows that the top 1/3 and middle 1/3 farms sorted by net farm earnings have a current ratios of 1.53 and 1.64 and intermediate ratios of 2.07 and 2.27, above the desired level of at least 2.0. The top 1/3 farms are less heavily leveraged at .95 while the bottom 1/3 farms have more leverage at 1.64. The top 1/3 farms lost \$7,200 in equity change while the bottom 1/3 farms lost \$93,700 in equity. The top 1/3 farms had Net Farm Earnings as a percentage of Average Farm Assets of 4.78% compared to a negative -5.29% for the bottom 1/3 farms.

### Measures of Financial Efficiency

The top 1/3 swine farms had 37 cents in sales for each dollar in investment (Table 19). The top 1/3 farms also had double the Net Profit Margin at 17.28, Return on Investment at 6.03, and the only positive Return on Equity at 2.22 compared to the average farm. The bottom 1/3 farms had a negative Rate of growth in Equity of -12.93% while the top 1/3 farms grew at a positive 5.12%.

The top 1/3 farms also reported lower expenses in each of the four categories that equal the Value of Farm Production. The top 1/3 farms had only 14% in interest expense, 10% for depreciation, and 63% in operating expense for a positive 13% net farm

earnings while the bottom 1/3 farms had 20% interest expense, 11% depreciation, and 85% operating expense for a negative -16% net farm earnings. The bottom 1/3 farms have much higher variable expense, fixed, and total expense at 69%, 46%, and 116% compared to the average of only 61% variable expense, 40% fixed expense, and 101% total expense. The top 1/3 farms are below the average with 55% variable expense, 32% fixed expense, and 87% total expense.

#### Efficiency and Cost Measures Per Tillable Acre

The bottom 1/3 farms had the lowest Value of Total Production per tillable are at \$486, but also the highest Total expense at \$553 per acre, Machinery Investment per acre at \$233, and Machine cost at \$99.62. The middle 1/3 farms had the lowest Total expense at \$465, Machine Investment at \$195, and Machine cost per tillable acre at \$93.47. The top 1/3 farms had the highest Value of Crop Production at \$595.03 but also the highest variable expense per tillable acre at \$309.45.

#### Efficiency and Cost Measures Per Sow

The bottom 1/3 farms are the most inefficient farms weaning only 15.37 pigs per sow per year and 7.73 pigs per litter. The top 1/3 farms raise more pigs per litter at 8.25 and have the highest debt per sow at \$3,780. The middle 1/3 sell more feeder pigs at 497 per farm for a higher price at \$47 than the average farm. The bottom 1/3 farms sell their market hogs at lower weights around 210 pounds and about \$1.50 less per cwt. of pork produced than the other farms. The top 1/3 farms had the highest Hog Return per sow at \$1,693 because they sold very few feeder pigs and also the highest Return above feed fed per sow at \$812. The bottom 1/3 had the lowest Hog Return per sow at \$1,278 and lowest Return above feed fed per sow at \$556. The middle 1/3 farms had the highest Returns per \$100 of feed fed because they had more feeder pigs sold and thus less feed expense. Overall, it appears that the smaller farrow-to-finish swine farmers had the top earnings while the larger sow operations with more debt were having difficulties surviving.



Table 15: Number of Farms, Crop Yields, and Measures of Size for 32 Swine Farms  
By Net Farm Earnings, Ohio, 1985.

SWINE FARMS		NET FARM EARNINGS			
Size Characteristics	Unit	Top 1/3	Middle 1/3	Bottom 1/3	All Farms
NUMBER OF FARMS	Number	10	12	10	32
NUMBER OF SOWS	HEAD	94	101	148	113
TOTAL TILLABLE	Acres	453	410	596	482
VALUE OF FARM PRODUCTION	\$	\$255,477	\$194,471	\$284,557	\$241,687
BALANCE SHEET DATA					
Total Assets	\$1,000	728.5	736.2	894.1	783.2
Total Liabilities	\$1,000	355.3	342.7	555.2	413.1
Total Equity	\$1,000	373.2	393.5	338.9	370.1
CROP YIELDS					
Corn	Bu./A.	152	126	122	134
Soybeans	Bu./A.	48	39	39	41
Wheat	Bu./A.	69	57	71	67
ACREAGE					
Total Owned	Acres	224	163	216	199
Tillable Owned	Acres	182	193	199	191
Tillable Cash Rented	Acres	174	179	330	224
Tillable Share Rent	Acres	98	38	68	66
TOTAL TILLABLE	Acres	453	410	596	482
PERCENT OF TILLABLE ACRES					
Owned	Percent	40	47	33	40
Cash Rented	Percent	38	44	55	46
Share Rented	Percent	22	9	11	14

Table 16: Income, Expense and Measures of Earnings for 32 Swine Farms  
By Net Farm Earnings, Ohio, 1985.

SWINE FARMS		NET FARM EARNINGS			
Financial Characteristics	Unit	Top 1/3	Middle 1/3	Bottom 1/3	All Farms
-----					
INCOME					
Total Cash Income	\$	\$269,670	\$205,280	\$289,449	\$251,705
Other Income & Inv. Changes	\$	(\$14,192)	(\$10,810)	(\$4,892)	(\$10,017)
VALUE OF FARM PRODUCTION	\$	\$255,477	\$194,471	\$284,557	\$241,687
EXPENSE					
Total Variable Expense	\$	\$140,241	\$111,753	\$198,307	\$147,704
Total Fixed Expense	\$	\$82,019	\$78,826	\$131,235	\$96,202
TOTAL FARM EXPENSE	\$	\$222,259	\$190,580	\$329,542	\$243,905
EARNINGS					
Net Farm Earnings	\$	\$33,218	\$3,891	(\$44,985)	(\$2,218)
Net NonFarm Income	\$	\$12,427	\$10,887	\$19,493	\$14,057
NET EARNINGS	\$	\$45,645	\$14,778	(\$25,492)	\$11,839
Operator Labor Draw	\$	\$24,936	\$22,661	\$17,418	\$21,734
Income Tax	\$	\$1,616	\$2,113	\$902	\$1,579
		-----	-----	-----	-----
TOTAL NET EARNINGS	\$	\$19,093	(\$9,996)	(\$43,812)	(\$11,473)
NET FARM EARNINGS	\$	\$33,218	\$3,891	(\$44,985)	(\$2,218)
RETURN TO UNPAID LABOR & MGT	\$	\$10,827	(\$19,719)	(\$65,318)	(\$24,423)
RETURN ON INVESTMENT	\$	\$44,138	\$16,379	(\$6,015)	\$18,055
RETURN TO EQUITY	\$	\$8,282	(\$18,770)	(\$62,403)	(\$23,952)

Table 17: Income Statement for 32 Swine Farms By Net Farm Earnings,  
Ohio, 1985

SWINE FARMS		NET FARM EARNINGS				
Financial Characteristics	Unit	Top 1/3	Middle 1/3	Bottom 1/3	All Far	
<hr/>						
CASH INCOME						
Crops	\$	\$75,059	\$47,021	\$60,064	\$59,859	
Hogs	\$	\$160,987	\$131,712	\$179,749	\$155,872	
Dairy Products	\$	\$0	\$0	\$11,480	\$3,588	
Dairy	\$	\$0	\$0	\$1,174	\$367	
Beef	\$	\$18,386	\$2,459	\$5,481	\$8,381	
Sheep	\$	\$165	\$87	\$0	\$84	
CCC	\$	\$0	\$0	\$18,099	\$5,656	
Other Farm Income	\$	\$15,072	\$24,001	\$13,430	\$17,899	
<hr/>						
TOTAL CASH INCOME	\$	\$269,670	\$205,280	\$289,449	\$251,705	
Resale Purchases	\$	(\$19,358)	(\$7,349)	(\$5,560)	(\$10,543)	
Breeder L.S. Purchases	\$	(\$2,994)	(\$1,364)	(\$3,190)	(\$2,444)	
L.S. Inventory Change	\$	(\$1,681)	(\$2,691)	\$1,938	(\$929)	
Crop & Feed Inv. Change	\$	\$7,764	\$915	\$2,822	\$3,652	
Acct Rec Change	\$	\$1,055	(\$436)	(\$864)	(\$104)	
Net Non-Cash Farm Inc	\$	\$86	\$114	\$57	\$88	
L.S Pay/Futures Change	\$	\$936	\$0	(\$96)	\$263	
<hr/>						
VALUE OF FARM PROD.	\$	\$255,477	\$194,471	\$284,557	\$241,687	
EXPENSE						
Variable Expense						
Wages	\$	\$12,089	\$9,437	\$16,326	\$12,418	
Repair Machinery	\$	\$10,411	\$8,355	\$12,092	\$10,165	
Feed	\$	\$57,252	\$34,407	\$82,300	\$56,512	
Seed & Plants	\$	\$5,474	\$6,428	\$9,636	\$7,133	
Fertilizer & Lime	\$	\$18,177	\$16,009	\$20,921	\$18,222	
Spray & Chemicals	\$	\$7,986	\$8,538	\$12,065	\$9,468	
Custom Hire	\$	\$1,542	\$2,814	\$4,334	\$2,891	
Supplies	\$	\$2,003	\$2,856	\$5,014	\$3,264	
Breeding	\$	\$0	\$320	\$10	\$123	
Vet & Medicine	\$	\$3,305	\$2,480	\$7,327	\$4,252	
Fuel & Lube	\$	\$9,311	\$9,302	\$15,222	\$11,155	
Utilities	\$	\$4,553	\$4,336	\$5,545	\$4,782	
Marketing	\$	\$359	\$942	\$623	\$660	
Storage	\$	\$2,482	\$768	\$565	\$1,240	
Other Than Above	\$	\$5,298	\$4,760	\$6,328	\$5,418	
<hr/>						
TOTAL VARIABLE EXPENSE	\$	\$140,241	\$111,753	\$198,307	\$147,704	
Fixed Expense						
Interest	\$	\$35,856	\$35,150	\$56,388	\$42,007	
Taxes	\$	\$2,547	\$2,187	\$5,160	\$3,228	
Lease Payments	\$	\$13,951	\$18,014	\$31,922	\$21,090	
Insurance	\$	\$3,131	\$2,163	\$3,847	\$2,991	
Building Repairs	\$	\$1,909	\$1,656	\$1,956	\$1,829	
Building Depreciation	\$	\$9,584	\$7,818	\$14,636	\$10,500	
Equipment Depreciation	\$	\$15,042	\$11,840	\$17,328	\$14,556	
<hr/>						
TOTAL FIXED EXPENSE	\$	\$82,019	\$78,826	\$131,235	\$96,202	
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TOTAL FARM EXPENSE	\$	\$222,259	\$190,580	\$329,542	\$243,905	
NET FARM EARNINGS	24\$	\$33,218	\$3,891	(\$44,985)	(\$2,218)	

Table 18: Balance Sheet Data on 32 Swine Farms By Net Farm Earnings, Ohio, 1985.

SWINE FARMS		NET FARM EARNINGS			
Balance Sheet Information	Unit	Top 1/3	Middle 1/3	Bottom 1/3	All Farms
<b>BALANCE SHEET DATA</b>					
Current Assets	\$1,000	184.7	131.2	166.1	158.8
Current Liabilities	\$1,000	120.7	80.1	127.5	107.6
Current Equity	\$1,000	64.0	51.1	38.6	51.2
Intermediate Assets	\$1,000	132.7	143.7	193.5	155.8
Inter. Liabilities	\$1,000	32.7	41.1	99.3	56.7
Inter. Equity	\$1,000	100.0	102.6	94.2	99.1
Fixed Assets	\$1,000	411.2	461.3	534.5	468.5
Fixed Liabilities	\$1,000	202.0	221.5	328.4	248.8
Fixed Equity	\$1,000	209.2	239.8	206.1	219.7
Total Assets	\$1,000	728.5	736.2	894.1	783.2
Total Liabilities	\$1,000	355.3	342.7	555.2	413.1
Total Equity	\$1,000	373.2	393.5	338.9	370.1
Change in Equity, 1984-5	\$1,000	-7.2	-32.1	-93.7	-43.6
<b>FINANCIAL PERFORMANCE MEASURES</b>					
<b>Liquidity Ratios</b>					
Current Ratio (CA/CL)	Ratio	1.53	1.64	1.30	1.48
CurrLiab/TotLiab (CL/TL)	Ratio	.34	.23	.23	.26
Inter. (CA+IA)/(CL+IL)	Ratio	2.07	2.27	1.59	1.92
<b>Solvency Ratios</b>					
Debt/Asset(D/A)or(TL/TA)	Ratio	.49	.47	.62	.53
Equity Ratio (TE/TL)	Ratio	.51	.53	.38	.47
Leverage Ratio (TL/TE)	Ratio	.95	.87	1.64	1.12
<b>Profitability</b>					
Net Farm Earnings as % of Average Farm Assets	\$	4.78	.59	-5.29	-.30

Table 19: Measures of Financial Efficiency on 32 Swine Farms  
By Net Farm Earnings, Ohio, 1985.

SWINE FARMS		NET FARM EARNINGS			
Efficiency Measures	Unit	Top 1/3	Middle 1/3	Bottom 1/3	All Farms
FINANCIAL EFFICIENCY					
Turnover Ratio	Ratio	.37	.30	.33	.33
Debt Service Ratio	Ratio	9.01	14.85	29.97	18.48
PROFITABILITY					
Net Profit Margin	Percent	17.28	8.42	-2.11	7.47
Return on Investment	Percent	6.36	2.50	-.71	2.48
Return on Equity	Percent	2.22	-4.77	-18.41	-6.47
Rate of Growth in Equity	Percent	5.12	-2.54	-12.93	-3.10
EXPENSE AND EARNINGS AS A PERCENT OF VALUE OF FARM PRODUCTION					
Interest	Percent	14.03	18.07	19.82	17.38
Depreciation	Percent	9.64	10.11	11.23	10.37
Other Operating Exp	Percent	63.32	69.82	84.76	73.17
Net Farm Earnings	Percent	13.00	2.00	-15.81	-.93
Total	Percent	100.00	100.00	100.00	100.00
TOTAL EXPENSE AS A PERCENTAGE OF VALUE OF FARM PRODUCTION					
Variable Expense	Percent	54.89	57.47	69.69	61.11
Fixed Expense	Percent	32.10	40.53	46.12	39.80
Total	Percent	87.00	98.00	115.81	100.92

Table 20: Efficiency Measures and Cost per Tillable Acre on 32 Swine Farms  
By Net Farm Earnings, Ohio, 1985.

SWINE FARMS		NET FARM EARNINGS			
Efficiency Measures	Unit	Top 1/3	Middle 1/3	Bottom 1/3	All Farms
-----					
PRODUCTION EFFICIENCY PER TILLABLE ACRE					
Value of Crop Prod./T.A.	\$/A	\$165.62	\$114.71	\$100.76	\$124.28
Value of Total Prod./T.A.	\$/A	\$595.03	\$500.79	\$485.57	\$522.62
Variable Expense Per T.A.	\$/A	\$309.45	\$272.62	\$332.67	\$306.68
Fixed Expense Per T.A.	\$/A	\$180.98	\$192.30	\$220.16	\$199.74
Total Expense Per T.A.	\$/A	\$490.42	\$464.92	\$552.83	\$506.42
Machinery Investment/T.A.	\$/A	\$198.92	\$195.29	\$232.78	\$210.86
Machinery Cost Per T. A.					
Repair Machinery	\$/A	\$22.97	\$20.38	\$20.28	\$21.11
Custom Hire	\$/A	\$3.40	\$6.86	\$7.27	\$6.00
Lube & Fuel Cost	\$/A	\$20.54	\$22.69	\$25.54	\$23.16
Equipment Depreciation	\$/A	\$33.19	\$28.88	\$29.07	\$30.22
Machinery Invest @7.5%	\$/A	\$14.92	\$14.65	\$17.46	\$15.81
Machinery Cost Per T.A.	\$/A	\$95.03	\$93.47	\$99.62	\$96.31
Seed & Plant Cost Per T.A.	\$/A	\$12.08	\$15.68	\$16.17	\$14.81
Fert. & Lime Cost Per T.A.	\$/A	\$40.11	\$39.06	\$35.10	\$37.83
Spray & Chem Cost Per T.A.	\$/A	\$17.62	\$20.83	\$20.24	\$19.66
CAPITAL INVESTMENT					
Feed & Crop Capital	\$	\$73,997	\$54,619	\$59,618	\$62,237
Livestock Capital	\$	\$82,443	\$59,671	\$103,157	\$80,377
Machinery Capital	\$	\$90,149	\$80,054	\$138,759	\$101,554
Land & Building Cap	\$	\$399,951	\$394,175	\$502,423	\$429,808
Other Capital	\$	\$47,759	\$65,949	\$46,853	\$54,297
-----					
TOTAL FARM ASSETS	\$	\$694,300	\$654,467	\$850,811	\$728,272

Table 21: Swine Production Measures on 32 Swine Farms By  
Net Farm Earnings, Ohio, 1985

SWINE FARMS		NET FARM EARNINGS			
Efficiency Measures	Unit	Top 1/3	Middle 1/3	Bottom 1/3	All Farms
NUMBFR OF SOWS	HEAD	94	101	148	113
NUMBER OF LITTERS	NO.	185	203	293	226
NUMBER OF PIGS BORN	NO.	1,833	2,007	2,753	2,186
NUMBER OF PIGS WEANED	NO.	1,525	1,651	2,268	1,805
NUMBER OF LITTERS/SOW	LIT./SOW/YR	1.97	2.02	1.99	1.99
NUMBER OF PIGS/SOW	PIGS/SOW/YR	19.50	19.94	18.65	19.30
NUMBER PIGS WEANED/SOW	PWN/SOW/YR	16.23	16.40	15.37	15.93
NUMBER OF PIGS WFANED PER LITTER		8.25	8.12	7.73	8.00
TOTAL DEBT PER SOW	\$/COW	\$3,780	\$3,394	\$3,751	\$3,656
NUMBER FEEDER PIGS SOLD	\$	39	497	224	270
AVERAGE WEIGHT FEEDER PIGS	LBS.	49	57	48	55
PRICE OF FEEDER PIGS SOLD	\$/HD.	\$33	\$47	\$41	\$45
NUMBER OF MARKET HOGS SOLD	\$	1,555	1,036	1,767	1,424
AVERAGE WEIGHT MARKET HOGS	LBS.	222	225	210	218
PRICE MARKET HOGS SOLD	\$/CWT.	\$45.66	\$45.67	\$44.17	\$45.11
SALES OF FEEDER PIGS	\$	\$1,289	\$23,155	\$9,179	\$12,032
SALES OF MARKET HOGS	\$	\$157,583	\$106,556	\$163,690	\$140,123
OTHER HOGS INCOME	\$	\$1,762	\$21,738	\$22,474	\$15,767
TOTAL HOG RETURNS	\$	\$160,634	\$151,449	\$195,343	\$167,922
POUNDS OF FEEDER PIGS SOLD	LBS.	1,896	28,521	10,788	14,755
POUNDS OF MARKET HOGS SOLD	LBS.	345,094	233,309	370,593	310,606
OTHER HOGS SOLD	LBS.	41,179	63,850	57,729	54,914
TOTAL POUNDS HOGS SOLD	LBS.	388,169	325,680	439,110	380,275
VALUE OF CORN FED	\$	\$33,204	\$26,823	\$39,455	\$32,724
VALUE OF CONCENTRATES FED	\$	\$462	\$1,573	\$1,526	\$1,214
VALUE OF PURCHASED FEED FED	\$	\$49,481	\$37,767	\$69,272	\$51,180
VALUE OF OTHER FEED FED	\$	\$420	\$395	\$22	\$287
TOTAL VALUE OF FEED FED	\$	\$83,568	\$66,559	\$110,274	\$85,404
POUNDS OF CORN FED	CWT.	7,223	6,212	8,732	7,308
POUNDS OF CONCENTRATES FED	CWT.	128	225	337	230
POUNDS OF PUCHASED FEED FED	CWT.	6,072	3,411	7,604	5,538
POUNDS OF OTHER FEED FED	CWT.	98	83	2	63
TOTAL POUNDS OF FEED FED	CWT.	13,521	9,930	16,675	13,138
HOG RETURNS PER SOW	\$/SOW	\$1,693	\$1,406	\$1,278	\$1,426
VALUE OF FEED FED PER SOW	\$/SOW	\$881	\$618	\$721	\$725
RETURNS ABOVE FEED FED/SOW	\$/SOW	\$812	\$788	\$556	\$701
RETURNS PER \$100 FEED FED	\$/100	\$192	\$228	\$177	\$197
NET FARM EARNINGS	\$	\$33,218	\$3,891	(\$44,985)	(\$2,218)

# DISTRIBUTION OF FARMS BY SIZE, DEBT TO ASSET AND NET FARM EARNINGS

The number of farms in each category sorted by both number of sows and debt to asset ratios is shown in Table 22. Of primary interest is whether any size class of farms is experiencing the greatest financial difficulty. Thus we reported the data with emphasis on percent of farms by size class in each D/A class. There appear to be more smaller farms in the low debt to asset range and slightly more larger farms in the .71 Plus class. In Table 23, the farms are sorted by the number of sows and net farm earnings. The Up to 80 sows group have most of their farms in the middle 1/3 farms by Net Farm Earnings while the 80-120 sow group has more farms in the top 1/3 group but also the bottom 1/3. The 120 Plus sow group fall mainly in the middle and the bottom 1/3 farms. In Table 24, the farms are sorted by debt to asset ratios and net farm earnings. The top 1/3 farms have mostly have debt to asset ratios in the .41-.70 range while the middle 1/3 have slightly lower debt to asset ratios. The bottom 1/3 farms are fairly evenly distributed over all categories of debt to asset ratios.

Table 22: Distribution of 32 Swine Farms by Number of Sows and Debt to Asset Ratios, Ohio 1985.

DEBT TO ASSET RATIOS	NUMBER OF SOWS			
	Up to 80	80-120	120 PLUS	TOTAL
UP TO .40	7 (64)	2 (18)	2 (18)	11 (100)
.40-.70	4 (29)	7 (50)	3 (21)	14 (100)
.70 PLUS	1 (14)	3 (43)	3 (43)	7 (100)
Total	12 (37)	12 (37)	8 (25)	32 (100)



Table 23: Distribution of 32 Swine Farms by Number of Sows and Net Farm Earnings, Ohio 1985.

NET FARM EARNINGS	NUMBER OF SOWS			
	Up to 80	80-120	120 PLUS	TOTAL
Top 1/3	3 (30)	6 (60)	1 (10)	10 (100)
Middle 1/3	6 (50)	2 (17)	4 (33)	12 (100)
Bottom 1/3	3 (30)	4 (40)	3 (30)	10 (100)
Total	12 (37)	12 (37)	8 (25)	32 (100)

Table 24: Distribution of 32 Swine Farms by Debt to Asset and Net Farm Earnings, Ohio 1985.

NET FARM EARNINGS	DEBT TO ASSET RATIO			TOTAL
	Up to .40	.41-.70	.71 Plus	
Top 1/3	3 (30)	6 (60)	1 (10)	10 (100)
Middle 1/3	5 (42)	4 (33)	3 (25)	12 (100)
Bottom 1/3	3 (30)	4 (40)	3 (30)	10 (100)
Total	11 (34)	14 (44)	7 (22)	32 (100)

GLOSSARY-Definitions arranged in alphabetical order.

CURRENT RATIO: Total current assets divided by total current liabilities.

DEBT to ASSET RATIO: Total liabilities divided by total assets.

DEBT SERVICE RATIO: Sum of Total Interest and Principal divided by the Value of Farm Production.

EQUITY RATIO: Total equity divided by total assets.

INTERMEDIATE CAPITAL RATIO: Current assets plus intermediate assets all divided by the sum of current liabilities and intermediate liabilities.

LEVERAGE RATIO: Total liabilities divided by total equity.

NET CAPITAL RATIO: Total assets divided by total equity.

NET FARM EARNINGS: Value of farm production minus total farm expense (including variable and fixed expense).

NET NON-FARM INCOME: Amount reported as off-farm income minus off-farm expenses other than operator draw or income tax.

NET PROFIT MARGIN: Net Farm Earnings plus interest paid minus unpaid labor all divided by value of farm production.

OPERATING EXPENSE: Total farm expense minus interest paid and depreciation expense.

OPERATOR LABOR DRAW: Amount reported as withdrawn from the cash flow for personal use.

RATE of GROWTH IN EQUITY: Net Earnings divided by total equity.

RETURN to EQUITY: Net Farm Earnings minus operator labor draw.

ROE RATIO: Return to Equity divided by average farm equity.

RETURN to INVESTMENT: Net Farm Earnings plus interest paid minus unpaid labor and management.

ROI RATIO: Return on Investment divided by average farm assets.

RETURN to UNPAID LABOR and MANAGEMENT: Net Farm Earnings minus 6% of total equity.

TOTAL Net Earnings: Total farm income plus non-farm income minus total farm expense and non-farm expense other than operator draw and income tax.

TURNOVER RATIO: Value of farm production divided by average farm assets.

VALUE of FARM PRODUCTION: The amount of cash farm income (including breeding livestock and resale sales) plus crop and livestock inventory changes and accounts receivable changes, minus breeding livestock and resale purchases.